

REPORT OF BELL ATLANTIC
ON THE CAPACITY OF THE INTERFACES TO ITS
OPERATIONS SUPPORT SYSTEMS TO HANDLE
REASONABLY EXPECTED DEMAND

I. Introduction and Summary.

In connection with the merger between Bell Atlantic and the former NYNEX, Bell Atlantic committed to provide the Commission with evidence demonstrating that its interfaces for obtaining access to Bell Atlantic's operations support systems are capable of handling reasonably expected demand. This report provides that evidence.

As an initial matter, actual commercial experience demonstrates that Bell Atlantic has the capacity to handle all current demand. During 1997 alone, for example, Bell Atlantic's pre-ordering interfaces handled more than 580,000 transactions from competitors, and currently are handling approximately 4,500 transactions per day. Also since January 1997, Bell Atlantic has processed over 120,000 orders from competitors – for a total of more than 210,000 resale lines and nearly 30,000 unbundled loops – and it currently is processing approximately 1,500 orders each day.

Moreover, Bell Atlantic's interfaces already are capable of handling volumes that not only are several times greater than the current levels of demand, but that are significantly greater even than the levels of demand that are expected by the end of 1998. This fact is amply demonstrated by the results of high volume tests conducted by Bell Atlantic that were monitored by the independent firm of Coopers & Lybrand, L.L.P. As is confirmed by the accompanying Coopers' report, Bell Atlantic is currently able to handle a total of more than 120,000 pre-order transactions per day from competing carriers, and to

process total daily order volumes of almost 10,000 orders and peak day volumes of more than 17,500 orders. In each case, these operating support system interface capacities substantially exceed the volumes that Bell Atlantic expects to receive at the end of 1998.

In the section that follows, Bell Atlantic provides additional detail on the capacity of its interfaces for each of the various operations support system functions, including pre-ordering, ordering and provisioning, repair and maintenance, and billing. The information is provided separately for the interfaces that are in place throughout the New York and New England states that were served prior to the merger by the former NYNEX telephone companies, and for the interfaces that are in place throughout the mid-Atlantic states that were served prior to the merger by the Bell Atlantic telephone companies.

In addition, while not the subject of Bell Atlantic's commitment to provide evidence of the capacity of its interfaces to handle reasonably expected volumes of demand, the final section of this report also briefly summarizes evidence demonstrating that Bell Atlantic is providing competitors with access to its operations support systems on nondiscriminatory terms and conditions.

II. Bell Atlantic's Interfaces Are Capable of Handling Reasonably Expected Demand.

Perhaps the best evidence that Bell Atlantic's interfaces are capable of handling reasonably expected demand is the fact that Bell Atlantic currently is handling all the actual demand from the many competing carriers who are in commercial operation, and has done so throughout the course of the past year as volumes steadily increased. Standing alone, this experience shows that Bell Atlantic's systems are able to keep pace as volumes grow.

In addition, because competing carriers are not yet submitting the volumes of orders that it expects to receive later in 1998, Bell Atlantic also has conducted extensive high volume tests of its pre-ordering, ordering and provisioning systems. These tests, which were conducted separately for the New York and New England states, and for the mid-Atlantic states, were conducted under the supervision of the independent firm of Coopers & Lybrand. In conjunction with these tests, Coopers also reviewed Bell Atlantic's maintenance and trouble reporting and billing systems that are provided for use by competing carriers.

The purpose of the high volume tests was straightforward – to subject the operations support systems interfaces to volumes of demand that are well in excess of those Bell Atlantic expects to receive in 1998.¹ To do so, an independent third party² submitted orders from outside the company using the electronic interfaces that are provided to competing carriers. Bell Atlantic then processed these orders as it would in a production environment, including actually transferring lines to the account of the simulated competitor that was set up for purposes of the tests.³

¹ Exhibit 1 to this report shows the volume of orders that Bell Atlantic expects to receive in 1998. These forecasts were derived based on projections of share loss by independent financial analysts, and Bell Atlantic's own internal business planning projections.

² IMI Systems, Inc., as systems integration consultant, functioned as the test competitor for the tests.

³ As described in the Coopers' report, technical considerations inherent in converting existing unbundled loops to a new carrier made it impossible to complete all of the provisioning activities that would occur in a production environment for unbundled loop orders.

These tests were carefully designed to match, to the maximum extent possible, the circumstances that will exist at the time Bell Atlantic receives the higher volumes that were the subject of the test. For example, many competing carriers have not yet developed their own systems to use the electronic interfaces that are available to them, and continue to submit orders by facsimile or by overnight delivery. Because these competitors will, as a practical matter, need to use the electronic interfaces to generate the much higher volumes that were the subject of the tests – and also because the merger commitment requires Bell Atlantic to demonstrate that its interfaces are capable of handling reasonably expected demand – all of the test orders were submitted through the electronic interfaces.⁴ (The test also included live production orders, a number of which were not submitted electronically.)

The results of these tests, as is confirmed in the accompanying Coopers' report, demonstrate that Bell Atlantic's operating support system interfaces are capable of handling volumes that are several times the current level of demand, and that are

⁴ Likewise, the mix of order types that were submitted during the tests was selected to reflect the mix of orders that are expected later in 1998 when volumes increase. Although competing carriers currently are submitting a high percentage of business orders and orders for complex services, in order to significantly increase the volumes of orders they submit these carriers necessarily will have to broaden their marketing efforts to other segments of the market. As a result, the mix of orders submitted by competing carriers over time will more closely reflect Bell Atlantic's own experience. With increased use of electronic interfaces and an order mix more closely resembling Bell Atlantic's own experience, the percentage of orders that flow through will increase as well.

significantly greater even than the volumes that Bell Atlantic expects to receive by the end of 1998.⁵

A. Pre-Ordering

Although there is as yet no industry standard for electronic pre-ordering interfaces, Bell Atlantic nonetheless has pressed ahead to provide competing carriers with electronic access to its operations support systems to obtain pre-ordering information.⁶ These interfaces, which have been in use by competing carriers for the last year or more, have proven capable of handling all current demand – including more than 580,000 pre-ordering transactions during 1997 alone. In addition, the high volume tests of these systems demonstrated that they currently are capable of handling over 120,000 new pre-ordering transactions each day – more than five times the expected demand at the end of 1998.

1. New York and New England. Throughout its service areas in the New York and New England states, Bell Atlantic currently provides competing carriers with a choice of two pre-ordering interfaces. The first of these is the Electronic Interface format, or

⁵ Bell Atlantic has also conducted both internal tests and carrier-to-carrier tests of its interfaces. None of these tests, however, were capacity tests. Bell Atlantic conducts substantial internal testing during development and deployment of each of its interfaces and has performed over 329 end-to-end tests for unbundled elements and 525 end-to-end tests for resale in New York and New England alone. In addition, Bell Atlantic has engaged in a number of carrier-to-carrier tests that are intended to test the interaction of competing carriers' systems with Bell Atlantic's interfaces and systems. In New York and New England, Bell Atlantic has conducted tests with three carriers; in the mid-Atlantic states, Bell Atlantic signed test agreements with eight carriers even before they had signed interconnection agreements (carriers with interconnection agreements do not need a separate test agreement to test with Bell Atlantic). Only two of the carrier-to-carrier tests have resulted in written reports. Copies of those reports are attached as Exhibit 2.

⁶ According to the Commission, pre-ordering "includes the exchange of information between telecommunications carriers about current or proposed customer

“EIF.” This is an application-to-application interface that competing carriers can tie directly into their own back office systems, allowing a carrier both to integrate its operating support system with Bell Atlantic’s and to integrate their own pre-ordering and ordering systems. The second is a Graphical User Interface, or “Web GUI.” This interface can be operated using a personal computer that is connected to Bell Atlantic’s intranet, and it provides competing carriers with a way to access Bell Atlantic’s systems without incurring the cost to develop systems of their own that would be needed to use an application-to-application interface.

During 1997 alone, Bell Atlantic processed over 240,700 mechanized pre-order transactions from competing carriers in the New York and New England region. In December, the month with the highest volume, there were approximately 2,120 daily pre-order transactions, over 80% of which were requests for customer service records.

In addition, the high volume test of these systems demonstrates that they are capable of handling many times the current volume. As discussed in more detail in the Coopers’ report, the test of the pre-ordering interface in New York and New England has demonstrated that it has a capacity to process 5,765 pre-order transactions per hour, or 46,120 transactions in an eight hour day. This is more than 20 times the volume of pre-ordering transactions currently being received, more than three times the average daily volumes expected throughout 1998 (roughly 14,300 per day), and significantly greater even than the volumes expected by the end of 1998.

products and services or unbundled network elements or some combination thereof.” 47 C.F.R. ¶ 51.5.

2. Mid-Atlantic States. The pre-ordering interface currently in place throughout the mid-Atlantic states is the Electronic Communications Gateway, or “ECG.” This is a terminal emulation interface that has been in use for years by Bell Atlantic’s exchange access customers, including the major long distance carriers. Access to the ECG is available on a dial-up basis or using a dedicated private line.

During 1997 alone, Bell Atlantic processed over 340,000 mechanized pre-order transactions from competitors in the mid-Atlantic states. In November, the month with the highest volume, there were approximately 3,360 daily pre-order transactions, approximately 45% of which were requests for Customer Service Records.

In addition, the high volume test of these systems demonstrates that they too are capable of handling many times the current volume. In fact, the test results demonstrate that the interface has a capacity of 31,000 pre-ordering transactions in a three hour period, or more than 82,000 transactions in an eight-hour day. This is more than 40 times the volume of pre-ordering transactions actually being received, more than eight times the expected average daily volume throughout 1998 (roughly 9,400 per day), and significantly greater even than the volumes expected by the end of 1998.

B. Ordering and Provisioning

Bell Atlantic provides competing carriers with several options for submitting orders electronically, including the industry standard Electronic Data Interchange (EDI) version 7.0.⁷ Since January 1997, Bell Atlantic has processed orders for more than

⁷ According to the Commission, ordering “includes the exchange of information between telecommunications carriers about current or proposed customer products and services or unbundled network elements or some combination thereof.” 47 C.F.R. ¶ 51.5.

210,000 resale lines and nearly 30,000 unbundled loops. Although not all of these orders were submitted electronically, the high volume tests of Bell Atlantic's ordering interfaces demonstrate that they are capable of handling many times the volumes currently being received.

1. New York and New England. Bell Atlantic provides competing carriers operating in New York and New England a choice of three interfaces for ordering. The first of these is EDI version 7.0, which Bell Atlantic provides with substantial version 8.0 capabilities. (Bell Atlantic also continues to provide EDI version 6.0 for those competing carriers that have not yet made the transition to version 7.0.) In addition, Bell Atlantic provides the EIF interface which, as noted above, is also available for pre-ordering.⁸ Both EDI and EIF are application-to-application interfaces and, when used in conjunction with the EIF pre-order interface, allow competing carriers to integrate their own pre-ordering and ordering systems. Finally, Bell Atlantic provides the Web GUI, which allows competing carriers to submit orders electronically even if they choose not to undertake the development costs associated with using an application-to-application interface. Although EDI version 7.0 has been available since November 1997, no competing carriers have used it to submit production orders. (Two carriers are using EDI version 6.0 to submit orders.) One carrier uses EIF for its production orders, and 40 carriers use the Web GUI.

In addition, as used in this report, it means the actual submission of a request for those services.

⁸ Bell Atlantic implemented EDI version 7.0 for New York and New England in November of 1997, after the high volume test conducted with Coopers & Lybrand. In January, 1998, Bell Atlantic performed an additional test to confirm that EDI version 7.0 performed similarly to the EIF and EDI version 6.0 interfaces that were part of the high volume test.

Through the end of 1997, Bell Atlantic has processed nearly 90,000 resale orders for over 162,000 lines in New York and New England. In addition, since January, 1997, Bell Atlantic has processed approximately 3,700 orders for approximately 15,200 unbundled loops. Bell Atlantic has also processed over 1,600 interim number portability orders to port 5,500 telephone numbers on a stand-alone basis in New York and New England.

The high volume tests of the ordering interfaces in New York show that they have the capacity to process a daily volume of approximately 4,000 orders, and to handle peak day volumes of nearly 7,500 orders in a single day. The total order volume processed during the test is more than five times the actual number of orders Bell Atlantic currently receives, and is almost double the expected 1998 volumes over a similar period.

2. Mid-Atlantic States. Bell Atlantic also provides an EDI version 7.0 interface, with substantial version 8.0 capabilities, for competing carriers operating in the mid-Atlantic states. In addition, Sterling Commerce, Inc. has developed PC-based software for Bell Atlantic that allows carriers to submit orders via EDI without incurring the systems development and support costs associated with an application-to-application interface. In October 1997, Bell Atlantic began working intensively with a number of competing carriers to assist them in implementing the PC-based EDI software; as of January 1998, 18 competing carriers have installed this capability.

Since April 1997, Bell Atlantic has processed approximately 23,000 resale orders for more than 50,000 lines in the mid-Atlantic states. In addition, since January 1997, Bell Atlantic has processed 3,111 customer requests for 13,247 unbundled loops, and has processed 1,761 requests to port more than 12,000 telephone numbers.

The high volume test described above demonstrated that Bell Atlantic's ordering interface for the mid-Atlantic states currently has the capacity to process daily volumes of 5,000 orders, and to handle peak day volumes of approximately 10,000 orders in a single day. The total volume processed during the test is more than 20 times the actual number of orders Bell Atlantic currently receives over five days in the mid-Atlantic states, and is more than triple the expected 1998 volumes for a similar time frame.

3. Flow-Through. Many types of orders can flow from the interfaces through to the service order processors without manual intervention, and continue automatically into the provisioning systems. These order types are listed in Exhibit 3 to this report, and additional order types are steadily being added to the list.

In New York and New England, nearly 40% of current production resale orders flow through. During the high volume test, 87% of resale orders (including live production orders and test orders), and 73% of total orders (including unbundled network element orders) flowed through.⁹ In the mid-Atlantic states, the high volume test demonstrated that 76% of resale orders and 71% of total orders (including resale and unbundled network element orders) flowed through without manual intervention.

To handle those orders that do not flow through, Bell Atlantic currently operates four centers responsible for receiving and processing wholesale orders in New York and New England. The New York and New England resale centers have approximately 105

⁹ The common impression that all of Bell Atlantic's retail orders flow through is incorrect. For example, about 48% of orders received in New York are not processed through the Direct Order Entry front-end system, but instead are typed into the Service Order Processor system, or another back-end system, often after some separate manual step.

service order representatives, and the unbundled element centers have 67. In the mid-Atlantic states, Bell Atlantic operates three ordering centers that handle both resale and unbundled network element orders. There are 268 employees handling orders in these three centers.

In addition, Bell Atlantic has commissioned an outsourcing company, the ICT Group, to supplement the capacity of Bell Atlantic's internal centers. ICT has 22 trained representatives available to handle Bell Atlantic orders and can process approximately 670 overflow orders per day.

4. Provisioning. There is no separate interface for provisioning, since the provisioning process is internal to Bell Atlantic once the order has been submitted.¹⁰ Acknowledgments and status reports, for the most part, are provided to competing carriers by the same interfaces used for submitting orders.¹¹

Resale orders are provisioned using the same systems, processes, and technician pools as Bell Atlantic retail orders. After they are entered into the service order processor, resale orders and retail orders go into the same pool for processing and are handled on a first come, first served basis. As discussed in the Coopers' report, during the months in which the high volume tests were conducted (in which substantially more than

¹⁰ According to the Commission, provisioning "involves the exchange of information between telecommunications carriers where one executes a request for a set of products and services or unbundled network elements or combination thereof from the other with attendant acknowledgements and status reports." 47 C.F.R. ¶ 51.5.

¹¹ The primary exception involves provisioning of unbundled loop conversions ("hot cuts"), where the competing carrier receives notice of order completion while on the telephone with the Bell Atlantic technician at the conclusion of their coordinated activities.

the expected daily load based on 1998 forecasted volumes was processed), substantial additional capacity existed in the provisioning systems.

Since the beginning of 1997, as noted above, Bell Atlantic has provisioned nearly 30,000 unbundled loops. Provisioning new unbundled loops involves many of the same systems and processes that Bell Atlantic uses in its retail provisioning. The forecasted number of unbundled loops for 1998 represents less than two percent of the plain old telephone service provisioning Bell Atlantic will perform in 1998. As a result, Bell Atlantic has ample capacity to handle forecasted volumes.

The provisioning of unbundled loops where an existing service is being converted to a new carrier (“hot cuts”) involves a number of steps and processes that are different from those involved in provisioning any retail service. Nevertheless, Bell Atlantic can provision well in excess of the expected number of “hot cuts” as well. In conjunction with the high volume tests, Coopers & Lybrand observed Bell Atlantic’s provisioning of unbundled loops and determined that Bell Atlantic has the capacity to provision nearly 300 unbundled loops per day in New York and New England at the current level of staffing. In the mid-Atlantic states, Bell Atlantic has the capacity to provision at least 674 lines per day at current staffing levels. In each case, Bell Atlantic’s capacity can be readily increased by redeploying or adding personnel in the event demand increases.

C. Maintenance and Repair

The interface for the maintenance and repair process is the trouble reporting, or front end, system. Once reported, both competing carriers' trouble reports and Bell Atlantic's retail trouble reports are resolved using the same back-end systems.¹²

1. New York and New England. The interface provided to competing carriers operating in New York and New England is a Web-based interface called Repair Trouble Administration System, or "RETAS," which is based on the T1M1 industry standard messaging protocol. RETAS handled approximately 18,000 trouble reports during 1997, including 2,400 in the month of December. On the peak day of the high volume test described in the Coopers' report, the maximum utilization of the New York and New England systems was 66%, leaving ample excess capacity to handle additional trouble reports.

Although RETAS is available for both resale lines and unbundled loops, competing carriers have continued to submit unbundled loop troubles manually. Bell Atlantic currently has sufficient staff to handle 4,500 manually coordinated repair calls per month. This is sufficient to support 150,000 switched voice grade access lines, which is more than Bell Atlantic's 1998 forecasted unbundled loop levels for New York and New England.

¹² According to the Commission, maintenance and repair involve "the exchange of information between telecommunications carriers where one initiates a request for maintenance or repair of existing products and services or unbundled network elements or combination thereof from the other with attendant acknowledgements and status reports." 47 C.F.R. ¶ 51.5.

2. Mid-Atlantic States. Competing carriers in the mid-Atlantic states can provide trouble reports electronically either through the Electronic Communications Gateway, or “ECG” (the pre-ordering interface), or through Open System Interconnect, the industry standard T1M1 “electronic bonding” system. In 1997, competing carriers submitted most trouble reports manually, and used ECG to send fewer than 300 trouble reports. As described above, and in the Coopers’ report, however, the ECG has a capacity many times greater than current or expected demand for the interface.

Bell Atlantic also provides competing carriers operating in the mid-Atlantic states with a full service maintenance center in Bridgewater, New Jersey. The center has a staff of 65 people and is equipped to handle trouble reports on all types of resale services and unbundled elements. The staff there can perform loop tests, dispatch technicians located throughout the region to work on troubles and answer inquiries from the competing carriers. All the processes provided for competing carriers within the Bridgewater Center mirror the processes provided for end users within the retail environment. In addition, however, the staff in the Bridgewater Center tracks, manages, and in some instances proactively escalates repair tickets for competing carriers. The staff in Bell Atlantic’s retail trouble reporting offices do not similarly track retail trouble reports.

D. Billing

The current industry standard for delivering billing information to competing local exchange carriers is Billing Output Specifications (BOS) version 28, as specified by the Ordering and Billing Forum. Bell Atlantic has implemented the Bill Data Tape format

using BOS version 28 in both New York and New England and the mid-Atlantic states.¹³

Bill data tapes are delivered to competing carriers by a variety of means, including Network Data Mover, CD ROM or magnetic tape at the carrier's choice.

Since January, 1997, Bell Atlantic has billed competing carriers for approximately 240,000,000 call records and recurring charges, and has created 4,115 Exchange Message Record tapes (the tapes used to transmit a daily usage file to competing carriers). Bell Atlantic uses two different billing systems to generate bills for resale services, unbundled elements, and usage files. These same two systems are also used to generate retail bills. Historically, during the peak period for both retail and wholesale billing, system utilization has ranged from 53% to 72%. Bell Atlantic therefore has ample additional capacity to handle the additional billing volume created by competing carriers.

III. Bell Atlantic's Interfaces Provide Nondiscriminatory Access To Its Operations Support Systems.

Although Bell Atlantic's commitment in the merger proceeding is limited to a demonstration of the ability of the interfaces to its operations support systems to handle reasonably expected demand, Bell Atlantic's experience to date and the high volume tests (including the identification and resolution of problems uncovered by the tests) also demonstrate that the interfaces are capable of providing competing carriers with non-

¹³ According to the Commission, billing "involves the provision of appropriate usage data by one telecommunications carrier to another to facilitate customer billing with attendant acknowledgements and status reports. It also involves the exchange of information between telecommunications carriers to process claims and adjustments." 47 C.F.R. ¶ 51.5.

discriminatory access to the operations support systems for pre-ordering, ordering and provisioning, maintenance and trouble reporting, and billing.

For example, the access Bell Atlantic provides to its systems to obtain pre-ordering information allows competing carriers to perform pre-ordering functions in substantially the same time and manner that Bell Atlantic does for itself. Bell Atlantic service representatives and competing carrier employees obtain the same pre-ordering information from the same support systems. In New York and New England, the average response time to retrieve a customer service record (which, as noted above, accounted for more than 80% of pre-ordering transactions during December) is less than three seconds for competing carriers. The average response time for other pre-ordering transactions is in the seven to nine second range.

To put the numbers in context, a typical contact with a customer ordering a new line takes a Bell Atlantic service representative approximately 25 minutes, and involves four pre-order transactions (one customer service record retrieval and three other transactions). Assuming such a contact would take a competing carrier's service representative approximately the same length of time, the incremental difference resulting from use of the interface is only 27 seconds – less than 2% – spread out over the length of the call. Consequently, any differences between these response times and the response times experienced by Bell Atlantic representatives on their face cannot be considered competitively significant.

On the peak day of the New York and New England high volume test, the pre-ordering response times were slightly longer than are being experienced with live orders (7.7 seconds retrieve a customer service record and 17.2 seconds for other pre-ordering

transactions). It is unlikely, however, that competing carriers will ever experience the response times recorded on the peak day of the test. That test was conducted in October, at a time when response times for other pre-ordering transactions in New York and New England were averaging 10 to 11 seconds. Response times have decreased each month since then, and the improvements that have been made in the systems will result in reduced response times during heavy volume loads just as they have at current volumes.

Moreover, even if competing carriers were to experience the longer response times, the incremental difference of all pre-ordering transactions for a competing carrier's representative in a typical customer contact still would total only 58 seconds – less than 4%. This would not be “dead air time,” but instead would be consumed by the representative obtaining information from, or explaining services to, the end user while the information is retrieved.

In the mid-Atlantic states, the average response time to retrieve a customer service record is in the three to four second range for competing carriers. The average response time for other pre-ordering transactions is less than six seconds. Bell Atlantic representatives experience response times of approximately one-half second for customer service record requests and over six seconds for other pre-ordering transactions.

Based on the same new line customer service order contact of 25 minutes – and four pre-order transactions – described above, total pre-ordering response time for CLEC

representatives would, on average, be less than two seconds longer than for Bell Atlantic representatives.¹⁴

The high volume tests also showed that Bell Atlantic's ordering interfaces perform well. Bell Atlantic measured the timeliness of order confirmations, order rejections, and completion notifications for each of four order types – resale flow-through orders, resale orders involving manual processing, unbundled loop orders, and orders for combinations of unbundled elements. For New York and New England, the test results exceeded Bell Atlantic's performance targets on eight of these twelve measurements.¹⁵ When the first day of the test revealed problems in the other categories, Bell Atlantic implemented corrections to its systems that were identified during the initial days of the high volume test, and these corrections significantly improved the timeliness of notices being returned to the test carrier. The remainder of the test demonstrated that those modifications were successful – by the last day of the test, as described in the accompanying Coopers' report, performance met or exceeded the targets for all notices and order types but one.

Bell Atlantic has continued to make improvements to the New York and New England ordering interfaces and processes since the test. For example, since implementing EDI version 7.0 for New York and New England in November, 1997, Bell Atlantic has issued two additional releases that increased order flow-through. In addition, between

¹⁴ Even with the longer response times recorded during the high volume test, the incremental response time experienced by a competing carrier's representative would be less than 16 seconds – or approximately 1% – spread over the length of the call.

¹⁵ The performance targets against used during the tests were based on agreements with competing carriers operating in the Bell Atlantic region.

November 1 and January 1, Bell Atlantic added 45 service representatives in the resale centers and 20 representatives in the unbundled network element centers.

In the mid-Atlantic states, results on the test orders exceeded performance targets for six of the twelve timeliness measurements. For live production orders processed during the high volume test, however, performance exceeded the target in seven of eleven applicable categories, and was better than test order results for all but one order type.¹⁶ Merely conducting the test also proved to be valuable in that it revealed some system and software problems that affected the performance of the interfaces and that have since been corrected. As a result, the test proved to be a useful tool that allowed Bell Atlantic to further improve the performance of its systems.

The processing of live orders during the test also allowed Bell Atlantic to demonstrate the impact of other system and process improvements made during the fourth quarter of 1997. For example, between November and January, Bell Atlantic added approximately 60 service representatives to the centers handling mid-Atlantic orders. In December, Bell Atlantic deployed software that enabled Convert - As Specified resale orders to flow through from the interface to the service order processors. Bell Atlantic also implemented new software that automatically distributed orders requiring manual processing to service representatives based on their experience and skills.

¹⁶ The exception was timeliness of order completion notification for unbundled loops. As noted above, however, for unbundled loop orders that involve converting an existing service to a new carrier, the carrier will have actual knowledge that the order has been completed instantaneously upon completion of the cutover, because the process is coordinated between Bell Atlantic and the competing carrier by having technicians from both companies on the telephone throughout the cutover process. As a result, the competing carrier knows that the order has been completed well before the formal notification is sent.

Moreover, as noted above and in the Coopers' report, the high volume test uncovered several system problems which have been identified and addressed.¹⁷ Bell Atlantic therefore continues to further increase its capability to process orders from competing carriers.

CONCLUSION

Bell Atlantic's electronic interfaces for pre-ordering, ordering and provisioning, maintenance and trouble reporting, and billing are in place, operational, and handling the current volume of transactions Bell Atlantic receives. In addition, Bell Atlantic has demonstrated that the interfaces have the capacity to handle volumes significantly in excess of the current level of transactions and the level anticipated for 1998. Bell Atlantic's interfaces, therefore, are capable of handling reasonably expected demand.

¹⁷ For example, in response to a transmission problem between Bell Atlantic and the test competitor, caused when the messaging program exceeded a UNIX system-specific message maximum, Bell Atlantic implemented a program change that expanded the capacity of the messaging program and also established an alarm system to notify Bell Atlantic personnel immediately if transmission problems with competing carriers occur in the future.

In addition, as noted in the Coopers' report, the test uncovered a billing usage issue in Pennsylvania that has been addressed by Bell Atlantic.